



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------|------------------|
| 09/889,380 | 07/16/2001 | Masashi Nakamura | 450106-02849 | 3746 |
| 20999 7590 03/22/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151 | | | EXAMINER SHANG, ANNAN Q | |
| | | | ART UNIT 2623 | PAPER NUMBER |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | | MAIL DATE | |
| 3 MONTHS | | | 03/22/2007 | |
| | | | DELIVERY MODE PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/889,380

Applicant(s)

NAKAMURA ET AL.

Examiner

Annan Q. Shang

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-14 and 18-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-14 and 18-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Miscellaneous

1. Please note that the Examiner of record for the prosecution of this application has changed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 7-9, 13 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chimoto et al (5,838,383)** and in view of **Albanese et al (5,617,541)**.

As to claim 1, note the **Chimoto** reference discloses a multimedia TV receiver and method of booting the

A plurality of digital signal processing blocks including at least a signal processing blocks for decoding data streams (fig.1 TV Receiver 301, MPEG module, etc., col.7, lines 30-60);

CPU 313 (a host processing block) for controlling the digital processing apparatus by outputting a command of a high layer and not on a real time basis; Bus 302 connects the modules 303-308 and CPU 313 for transferring the command and for transferring the data of streams; where the processing unit of each of the digital signal

Art Unit: 2623

processing blocks interprets and executes the command (col.7, line 50-col.8, line 14, lines 27-52, col.13, line 57-col.14, line 20 and col.36, line 25-col.38, line 1+).

Chimoto fails to explicitly teach where the data streams maybe assigned high priority and transmitted at high speed.

However, note the **Albanese** discloses system for packetizing data encoded corresponding to priority levels where reconstruction data corresponds to factionalized priority level and received factionalized packets and further discloses assigning priority levels to data streams and transmitting at high speed via satellite, wired network, etc.,(figs.2-5, col.2, line 53-col.3, line 6, col.4, line 50-col.5, line 45 and col.6, line 6-col.7, line 1+).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Albanese into the system of Chimoto to assign priority levels to data streams so as to guarantee acquisition of the data streams in order of importance under any data loss conditions and furthermore to automatically decode and recover received data streams in the order of importance.

As to claim 7, Chimoto further discloses where the data of streams contains video/audio data (col.9, lines 46-47).

As to claim 8, Chimoto further discloses where the AV data has been compressed (col.9, line 46-47).

As to claim 9, Chimoto further discloses where the bus is a general-purpose bus and where each block connected to the bus can be added or substituted (col.10, lines 54-59).

As to claim 13, the claimed "A digital signal processing method..." is composed of the same structural elements that were discussed with respect to the rejection of claim 1.

Claims 19-21 are met as previously discussed with respect to claims 7-9.

4. Claims 2, 10-12, 14 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chimoto et al (5,838,383)** and in view of **Albanese et al (5,617,541)** as applied to claims 1, 9, 13 and 21 above, and further in view of **Trovato et al (6,469,742)**.

As to claims 2 and 14, Chimoto as modified by Albanese, teach where the plurality of digital processing blocks include at least a front end block for processing received signal of a digital broadcast (M-304, col.7, lines 50-60), but fail to explicitly teach a plug-in interface block for connecting external hardware.

However, Trovato teaches consumer electronic devices with upgrade capability and modules with plug-in interface (fig.1, col.3, line 43-col.5, line 11).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Trovato into the system of Chimoto as modified by Albanese to provide a device that can readily accept and take advantage of new software/hardware.

As to claims 10-12, Chimoto teaches modules which can be replaced, but silent to installing software to control the new modules, where the software for operating the added or substituted block is stored in the memory and where when a block is

Art Unit: 2623

added...the software stored in the memory is installed and where when each block is added or substituted, a service center is accessed through a telephone line, software for operating the added or substituted block is downloaded from the service center through the telephone line and installed.

However, Trovato teaches installing software to control the new modules, where the software for operating the added or substituted block is stored in the memory and where when a block is added...the software stored in the memory is installed and where when each block is added or substituted, a service center is accessed through a telephone line, software for operating the added or substituted block is downloaded from the service center through the telephone line and installed (col.4, line 20-61 and col.5, line 9-34).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Trovato into the system of Chimoto as modified by Albanese to provide an automatic installation of corresponding software for the purpose of providing software/driver needs without requiring user interaction and without unnecessarily storing a plurality of different device drivers.

Claims 22-24 are met as previously discussed with respect to claims 10-12.

As to claim 25, Chimoto further disclose where CPU 313 processing block has a high level interface for processing the command not depending on hardware structure and where the plurality of digital signal processing blocks has a driver for interpreting the command and low level interface for controlling hardware (col.8, line 27-37, col.13, line 57-col.14, line 20 and col.36, line 25-col.38, line 1+).

5. Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chimoto et al (5,838,383)** and in view of **Albanese et al (5,617,541)** as applied to claims 1 and 13 above, and further in view of **Humpleman et al (6,198,479)**.

As to claims 6 and 18, Chimoto as modified by Albanese, disclose CPU 313 for executing program to control the other components of the receiver 301 (Chimoto col.7, lines 61-63), but fail to explicitly teach where the command is described and embedded in a script of hypertext, where the hypertext is interpreted by a browser and an indication for operating a function is displayed and where a command corresponding to the function is generated.

However, **Humpleman** discloses a home gateway and further teaches where command is described and embedded in a script of hypertext, where the hypertext is interpreted by a browser and an indication for operating a function is displayed and where a command corresponding to the function is generated (col.6, lines 60-66).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Humpleman into the system of Chimoto as modified by Albanese for the purpose of extending the upgrade functionality of the receiver and allow a user to easily control diverse devices in their home with a single remote control.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 2, 6-14 and 18-25 have been considered but are moot in view of the new ground(s) of rejection. The amendment to the claims and the error of references used in the prior rejection as result of wrong priority data on the Bibliographic data sheet necessitated the new ground(s) of rejection discussed above. This office action is non-final.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Thedens (6,041,035) discloses open system modular electronics architecture.

Horiguchi et al (6,810,199) disclose information processing apparatus, method and recording medium.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, call **800-786-9199 (IN USA OR CANADA)** or **571-272-1000**.

A handwritten signature in black ink, appearing to read "Annan Q. Shang". The signature is stylized with a large, looped "S" and a distinct "Q".

Annan Q. Shang